

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 September 2005 (09.09.2005)

PCT

(10) International Publication Number
WO 2005/083726 A1

(51) International Patent Classification⁷: **H01G 4/12**,
4/33, H01L 21/8246, 27/00

(21) International Application Number:
PCT/IB2005/000477

(22) International Filing Date: 25 February 2005 (25.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/548,536 27 February 2004 (27.02.2004) US

(71) Applicant: **ENERGENIUS, INC.** [CA/CA]; 351 Steel-
case Road West, Unit #3, Markham, Ontario L3R 4H9
(CA).

(71) Applicants and

(72) Inventors: **ZOU, Qin** [CA/CA]; 23 Mission Dr., Toronto,
Ontario M3A 2P1 (CA). **HIRMER, Gerhard** [DE/CA]; 4
Dodie St., Aurora, Ontario L4G 2L2 (CA). **XING, George**
[CN/CA]; 475 Cassandra Blvd., Apt. 732, Toronto, Ontario
L3A 2P6 (CA).

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report*
- *before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments*

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: THIN FILM FERROELECTRIC COMPOSITES, METHOD OF MAKING AND CAPACITOR COMPRISING THE
SAME

(57) Abstract: Thin film ferroelectric capacitor composites exhibiting reduced leakage current and enhanced breakdown strength are prepared using sol-gel processing. The composite contains a buffer layer and at least one dielectric layer and is formed by depositing by sol-gel processing onto a substrate a composition containing a polymeric heterocyclic amide, such as polyvinylpyrrolidone.



WO 2005/083726 A1